

WAFER HAVING BACK-SIDE ALIGNMENT MARKS

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5 ABSTRACT

A marked wafer includes a front-side surface and a back-side surface. A vertical scribe line and a horizontal scribe line are on the front-side surface of the wafer. A back-side alignment mark is located at an 10 intersection of the vertical scribe line and the horizontal scribe line. The back-side alignment mark extends from the front-side surface to the back-side 15 surface of the wafer. The back-side alignment mark is used to aligning a saw, which singulates the wafer from the back-side surface.